

**26th ANNUAL FAA-  
COMMERCIAL AVIATION  
FORECAST CONFERENCE**



**Pilot Shortages**  
**Presented by**  
**Kit Darby**

**WASHINGTON, DC**  
Tuesday  
Mar. 13, 2001

## Slide 2

# Career Development System



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## Career Development System



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## 4-Part Presentation

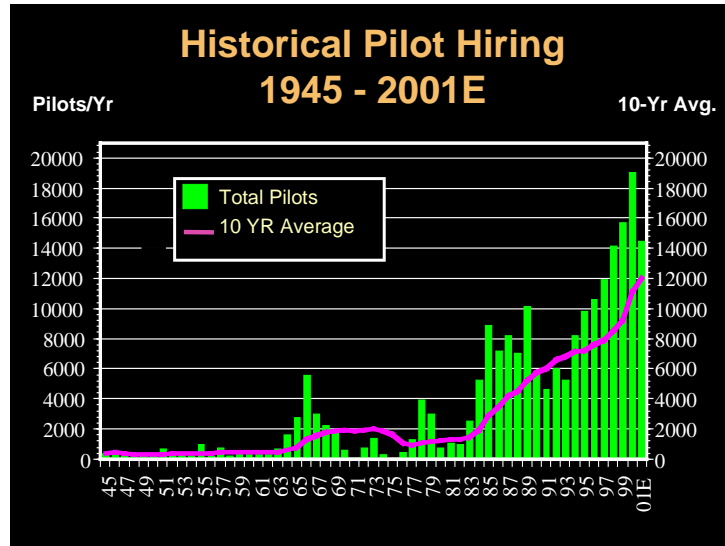
- **The Airline Pilot Job Market**
  - Hiring trends
  - Factors that drive pilot hiring
- **Job Search Planning**
  - Getting the job you want - fast
- **Résumés, Cover Letters & Applications**
  - Start Right or Improve
- **Interview Preparation**
  - Interview, Medical, Testing & Sim check

## The Objective

- Provide **up-to-date information** on the airline pilot job market
- To achieve your goal of employment as an airline pilot
- To help you market yourself and play the odds



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## FEB '00 Hiring Summary

Category	Total	Hiring	On Furlough	2000	'01 YTD	FEB
MAJORS	15	14	0	4,779	858	453
NATLS	32	25	108	6,601	1,095	454
JETS	54	34	283	2,805	452	222
NON-JETS	57	48	13	2,782	540	242
HELICOPTER	23	20	26	515	97	35
FRACTIONAL	5	5	0	1,363	169	93
CL/FOR/TNG	18	17	0	115	2	2
UPSTARTS	6	3	0	67	0	0
<b>TOTAL</b>	<b>210</b>	<b>166</b>	<b>430</b>	<b>19,027</b>	<b>3,213</b>	<b>1,501</b>



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## 9-Year Pilot Hiring Summary 1993 - 2001E

	1993	1994	1995	1996	1997	1998	1999	2000	2001E
MAJORS	463	1,266	2,377	3,080	3,854	3,646	5,000	4,779	4,000
NATIONALS	814	1,837	2,508	2,773	3,194	4,698	5,397	6,601	5,500
JET OPS	1,725	2,015	1,735	2,305	1,946	2,573	2,251	2,805	1,800
NON JETS	1,913	2,566	1,745	1,825	1,762	2,256	2,507	2,782	2,000
FRACTLS	100	100	200	300	300	400	581	1,363	840
HELO	200	144	188	156	350	365	256	515	225
UPSTARTS	N/A	288	76	276	98	477	193	67	40
TNG/FOR/CL	272	72	373	366	732	128	1,430	115	95
TOTAL	5,387	8,188	9,002	10,781	11,936	14,143	15,747	19,027	14,500

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## **Pilot Hiring Past, Present, and Future**

- **This is based on:**
  - **Continued U.S. economic success of the airline industry**
  - **Major airline pilot hiring**
  - **Continued domestic growth of regional airlines & int'l growth of the U.S. airlines**

## **Pilot Hiring Past, Present, and Future**

- Two- and three-pilot crews will lower the need for pilots
- Demand, due to growth and retirements, will be greater
- Re-engine and hush kit programs will keep fleets flying - DC-8/9, B-727/737 at AAL, DAL, UAL, USA, NWA—are now completed

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## **U.S. Pilot Hiring Projections 1999 to 2006**

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## Major, National, Jet Operator & New Entrant Airline Growth

- AIR, Inc. forecast:
  - 12,000 in 1997 – actual 11,936 (record)
  - 12,500 in 1998 – actual 14,143! (record)
  - 14,000+ in 1999 – actual 15,747 (record)
  - 19,027+ in 2001 (new record)
  - 14,500 projected for 2001
  - 50,000 new jobs flying jets by 2010 !

## **Factors That Drive Pilot Hiring Equipment Growth—Large Jets**

- 57% more large jet AC in the U.S. by 2020
- U.S. fleets will grow from 4,400 AC today to 6,900 by 2020 – 57% growth
- World fleet will grow from 14,334 AC today to 30,179 by 2020 – 90% growth

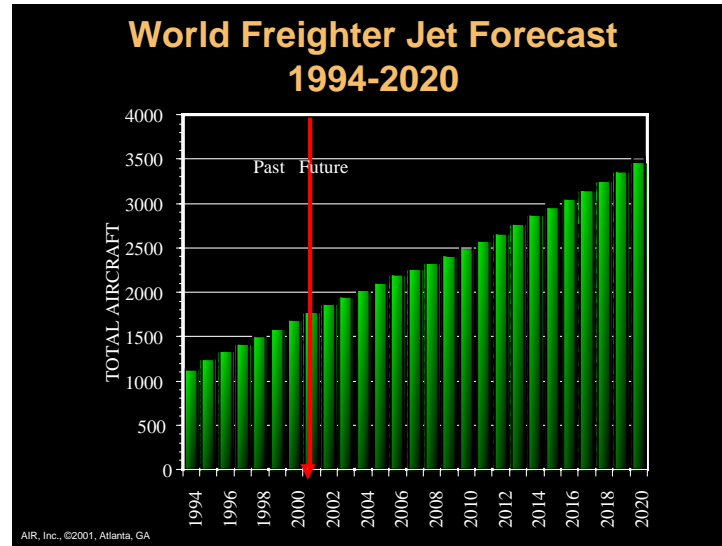
## **Equipment Growth—RJs**

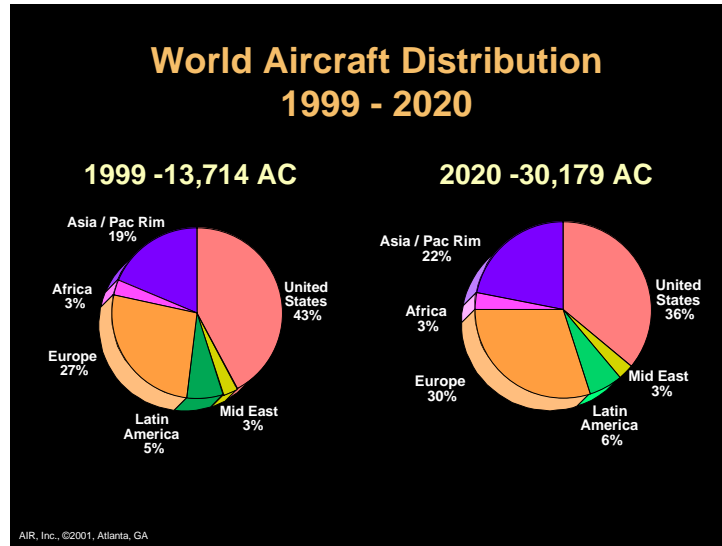
- 750 regional jets are on firm order with 220 deliveries due next year
- Regional jet fleet to grow from 900 jets today to 4,870 jets by 2019
- By 2019, RJs will comprise 15% of world fleet (7% today)

## **Equipment Growth—Cargo**

- **Dedicated freighter service to grow 6.1% annually through 2020**
- **Freighter fleet to grow by 4,180 AC by 2020 (up 73%)**
- **70% of demand will be met by used PAX AC**

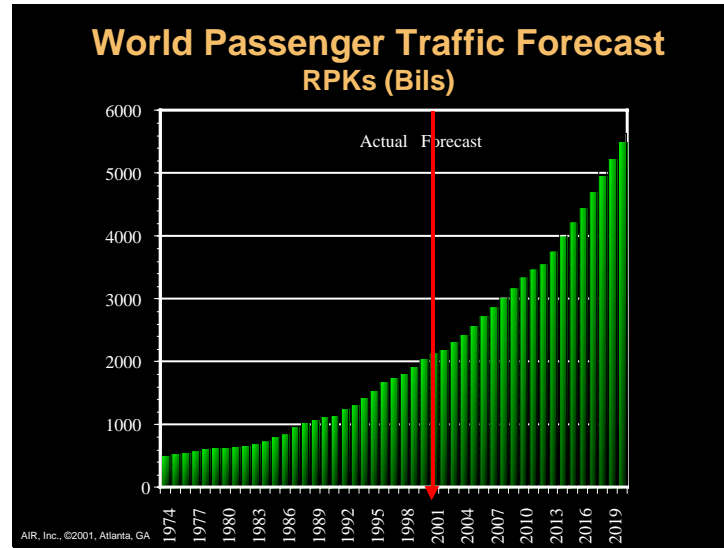






## Traffic Growth

- Annual traffic growth of an average of 4.9% through 2019
- Regional RPMs to increase 8% per year through 2020
- Domestic / int'l freight RTMs to increase 5.6% and 6.7% annually by 2010

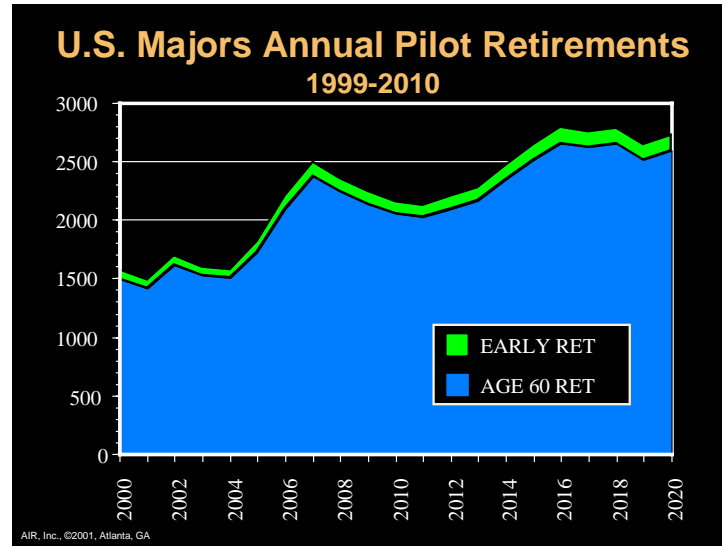


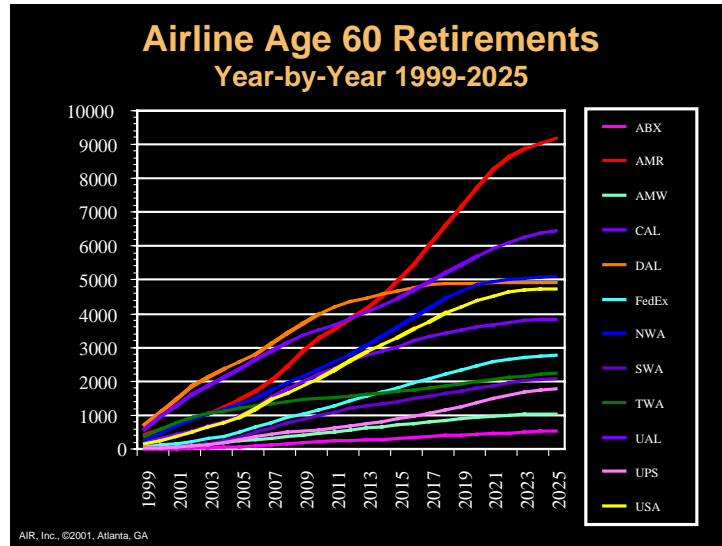
## Capacity

- Airbus – capacity to double by 2020 at an annual growth rate of 4.2%
- Seats will increase from 179 to 252 seats per aircraft
- Fairchild – regional ASMs to increase 7% per year by 2020
- Seats on regional jets to increase from 33 seats to 42 seats by 2010

## **Pilot Retirements**

- Established airlines will retire 50% of their pilots by 2010 - 32% to 60%
- Some pilots are flying past age 60 as FE (274 at UAL - 3%)

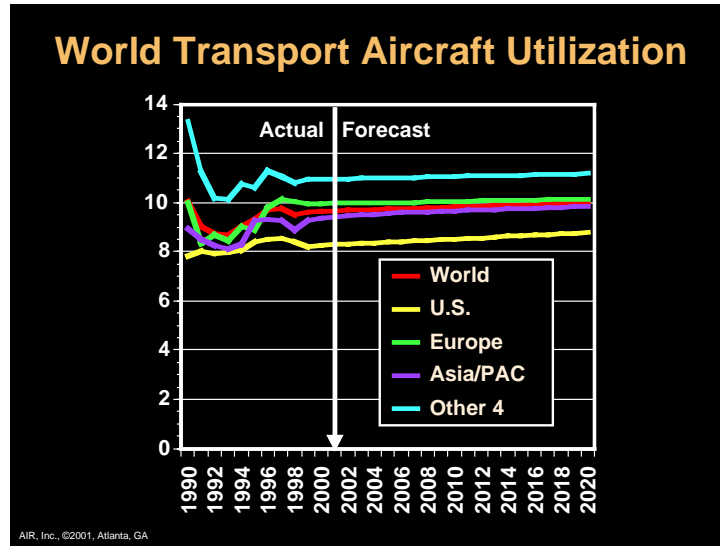




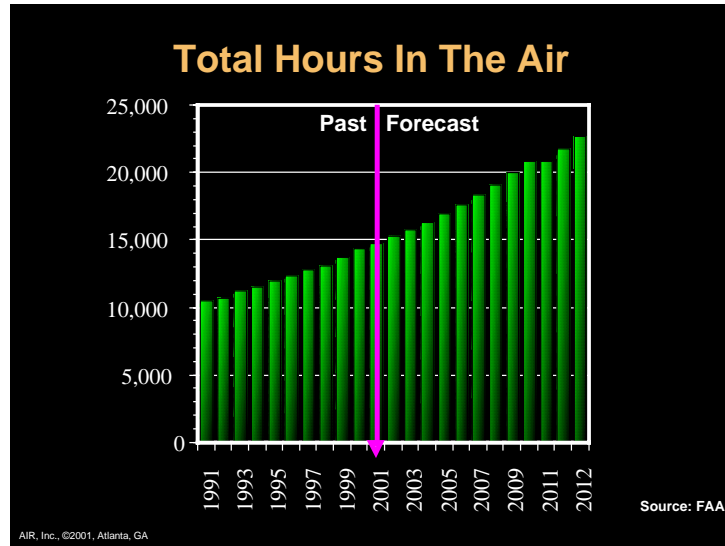


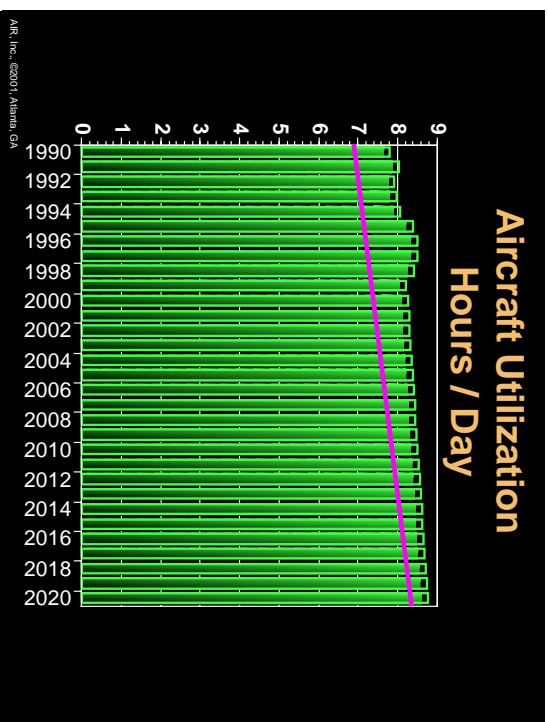
## **Pilot and Aircraft Utilization**

- AC utilization is approximately 8.26 hours/day in the U.S.
- AC utilization expected to increase 5% annually over the next 20 years
- U.S. pilot productivity is nearing its maximum



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## **Pilot and Aircraft Utilization**

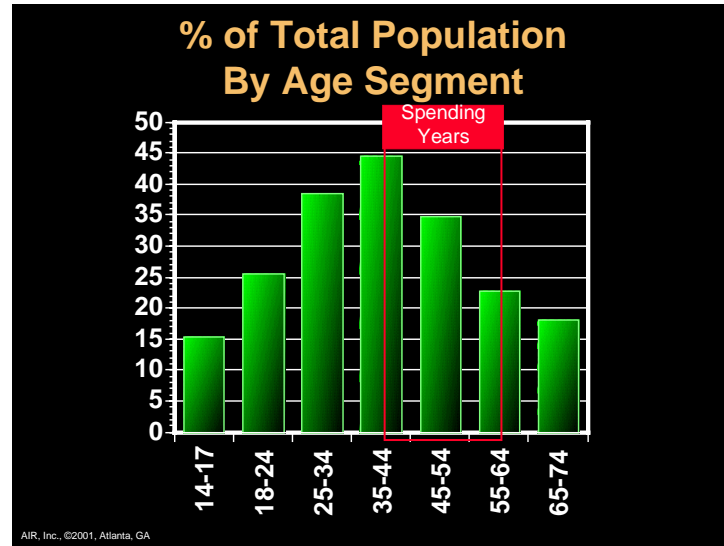
- 15 days / month =
- 80 hours / month =
- 160 on-duty hours / month =
- 240-320 hours away from home / month

## Work Rules

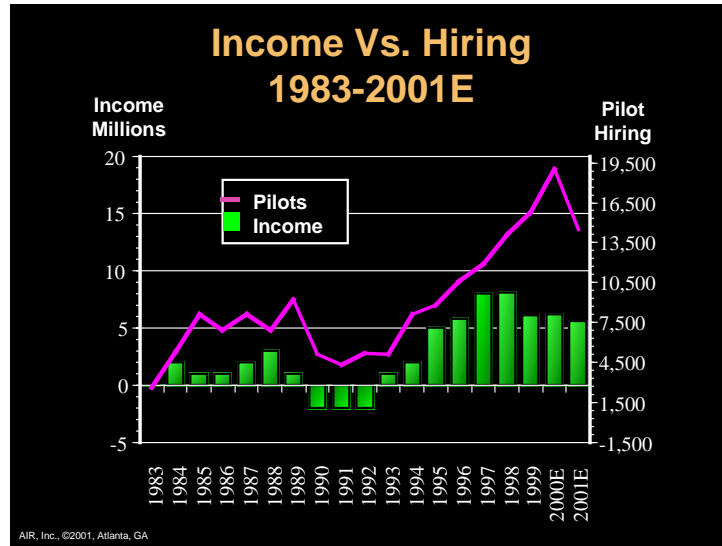
- Future productivity gains will be small
- The FAA maximum is  $1,000 / 12 = 83$  hours per month

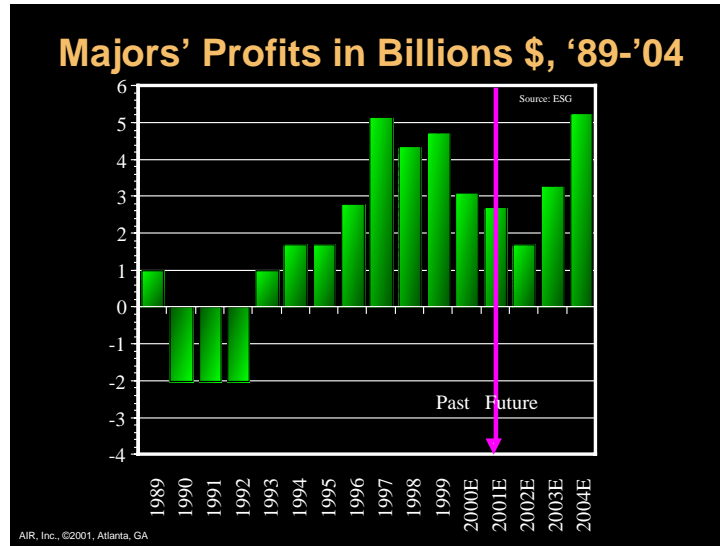
## **Consumer Demand**

- **“Baby Boomers” are in their prime personal and business flying years – age 40-60**
- **Tourism is expected to grow 5.9% annually through 2006**









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## Risk Factors

- Recession
- Labor
- Bankruptcy
- Mergers
- Fuel Prices
- Cross-over Agreements
- New Entrant Airlines

## **Minimum Qualifications**

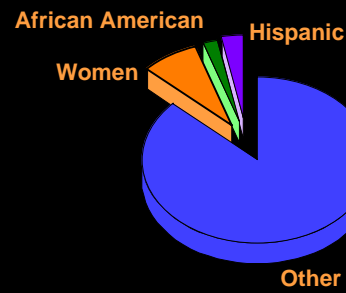
- All airlines have published minimum hiring criteria for pilots
- Most applicants exceed these normal minimums
- Minimum requirements are used to pre-screen applicants
- Those who fall short are not considered

## **Competitive Qualifications Minorities**

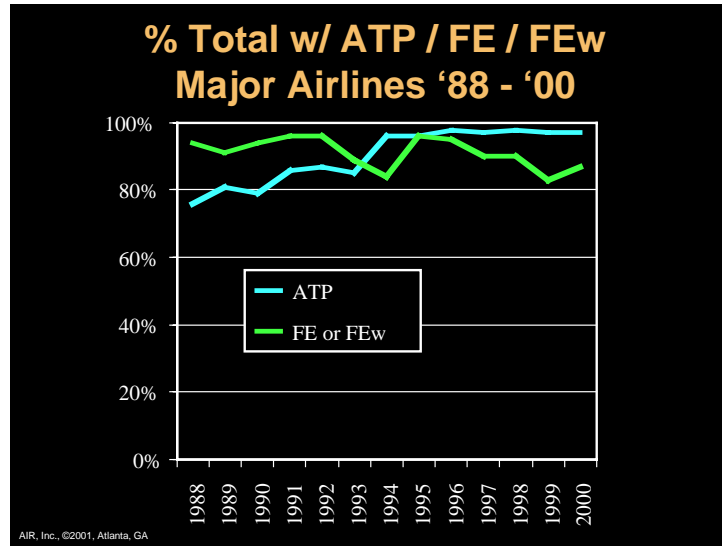
- The qualified minorities (women, African Americans, and Hispanics) are hired at the same ratio to those interviewed
- They do not have a better chance of success in the interview
- Minorities get hired a little younger with slightly lower average qualifications & experience

## Competitive Qualifications Minorities

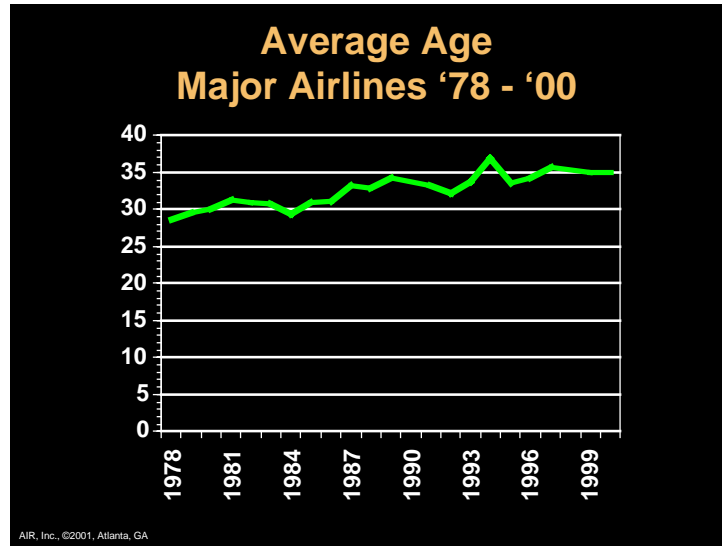
- 0 - 12% Women – average 6%
- 2.0% African American
- 3.9% Hispanic

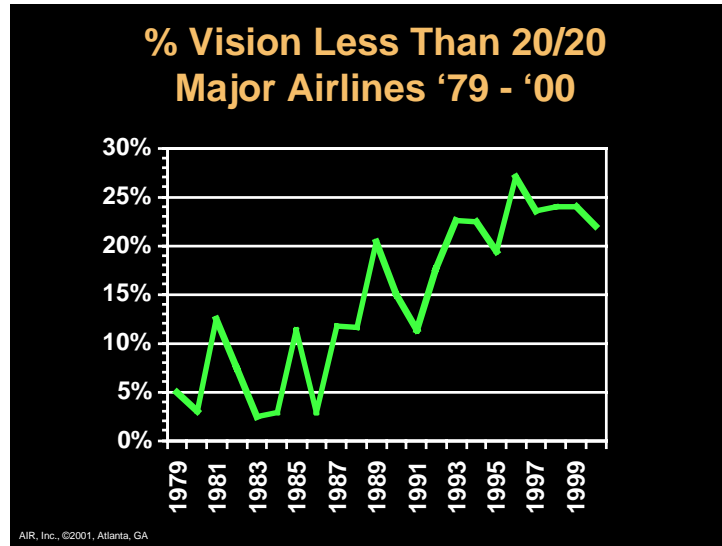


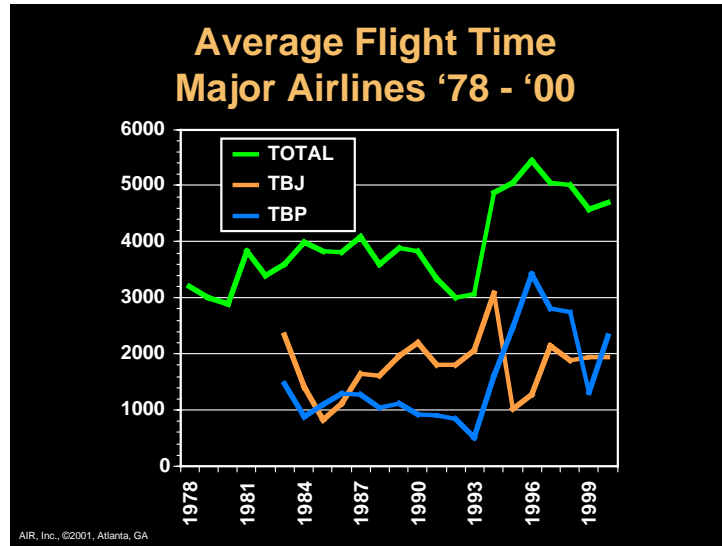
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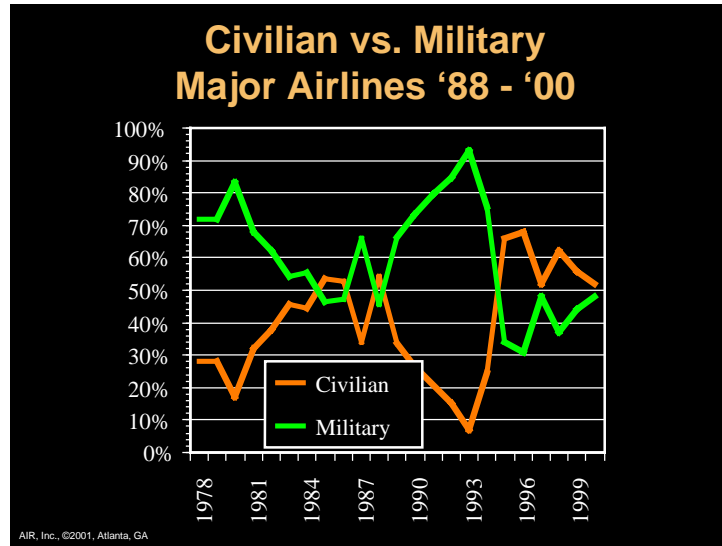


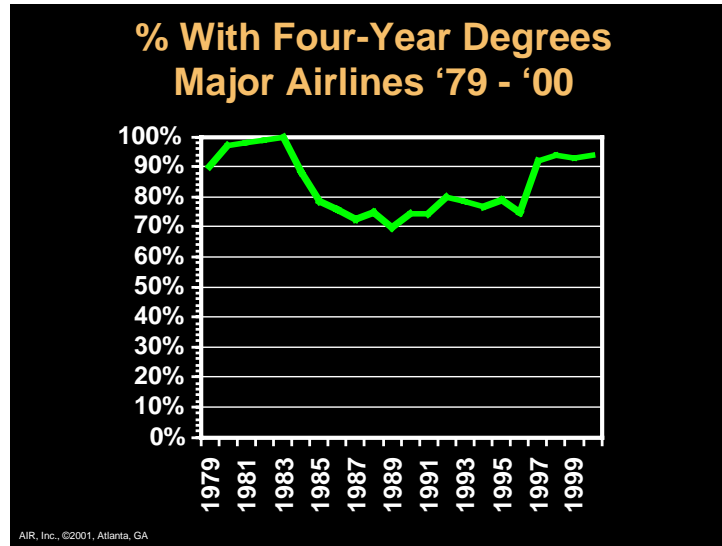












## **The Pilot Records Improvement Act**

- Adds elements to your background check dating 5 years back:
  - FAA records - airmen's, enforcement, & medical
  - All employment records
  - Training records
  - Pilot performance

## **The Pilot Records Improvement Act**

- **New amendment 10/97**
  - **Airlines can hire & train pilots pending a records check**
  - **Small carriers can hire, train, & fly pilots for 90 days pending a records check**

## **The Pilot Records Improvement Act**

- Formal pilot screening was studied!
- Airlines could be required to use:
  - Written testing - cognitive, intellect, and aptitude
  - Simulator evaluation
  - Pre-employment medical exam
  - ADA protections would be lost



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## Market Segment Analysis

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## **Foreign Flying**

- **Most western European carriers will not hire U.S. pilots**
- **Immigration with the right-to-work is difficult or impossible**
- **Pilot hiring and training procedures are very different**

## **Crew Leasing**

- **Most are based in Europe**
- **Most crew for carriers based in Asia, the Middle- and Far East**
- **Hire FAA licensed pilots**
- **Pilots must meet the requirements of the contracting carrier & country**

## **Foreign Flying & Crew Leasing Requirements**

- High time in seat
- Large and/or heavy transport experience

## **Corporate Flying** **15,337 Pilots / 11,798 AC**

- Corporate jobs are harder to obtain
- Who you know really counts
- Recommendations are a must
- The network is critical to getting most corporate jobs

## **8 Fractional Ownership**

### **1,478 Pilots / 433 Aircraft**

- **First fractional airline:**  
Executive Jet Aviation, 1986
- **Concept:** Individuals/companies buy a piece or fraction of an airplane
- **Segment is experiencing significant growth**

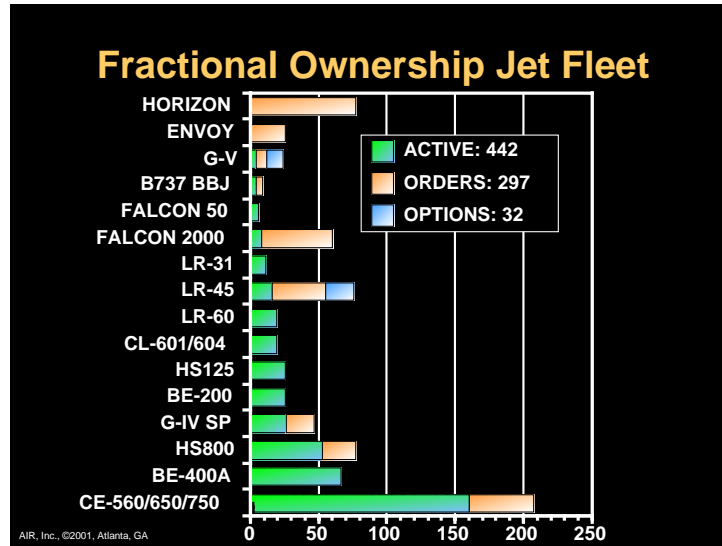
## **Fractional Ownership**

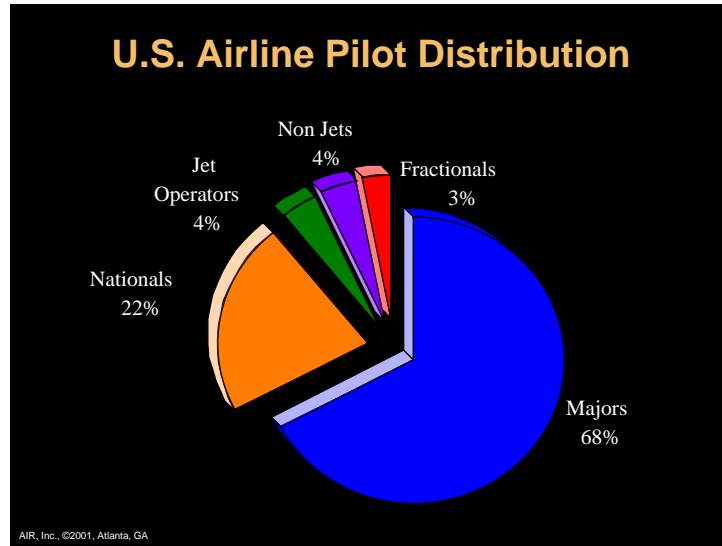
- **Today:** Business Jet Solutions  
Raytheon Travel Air  
Flight Options  
Gulfstream Share  
Citation Shares  
Corporate Air Partners  
Executive Air Shares
- **Considered an arm of corporate aviation**
- **Operationally structured more like an airline**

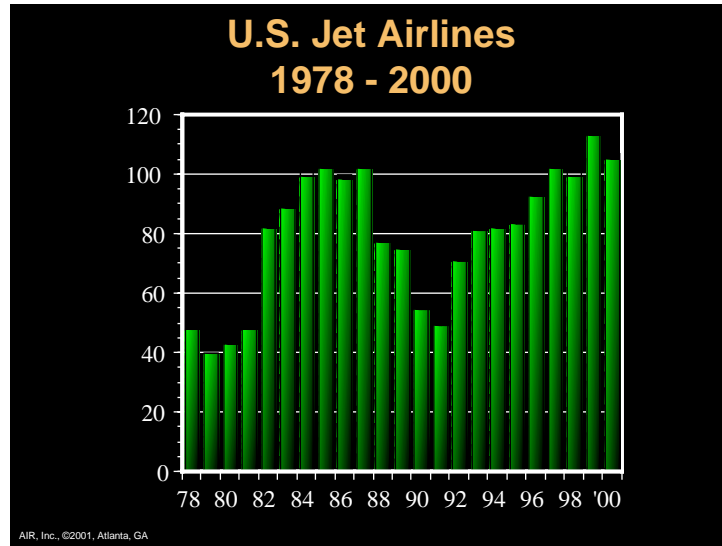
## Fractional Ownership

- Minimum Requirements: depends on aircraft
- Total time: 1,500-2,000 for First Officers  
2,500-4,000 for Captains
- Jet Time: Usually required for Captains  
500-1,500 hours w/ 300-500 in type
- Other: ATP, Class I, 6 mos currency,  
4-yr degree









## **7 New Entrants**

### **42 Pilots / 11 Aircraft**

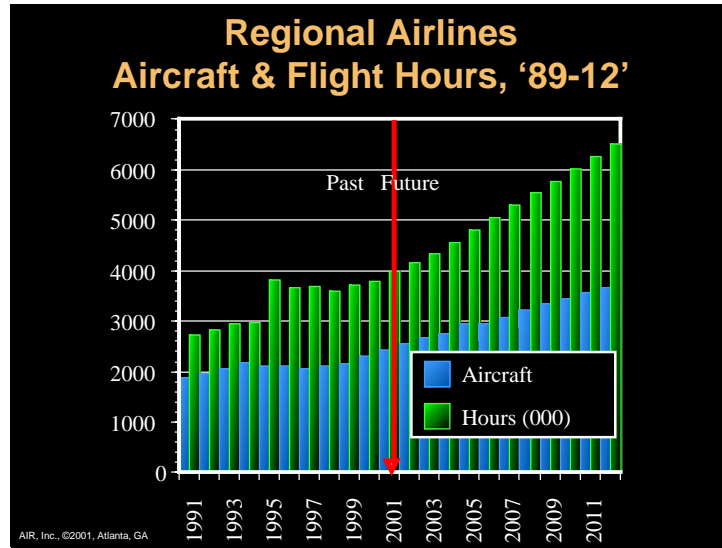
- The conversion to a low-cost market did not happen!
- New entrants have not had a major impact on the market
- Only 4% of total RPMs

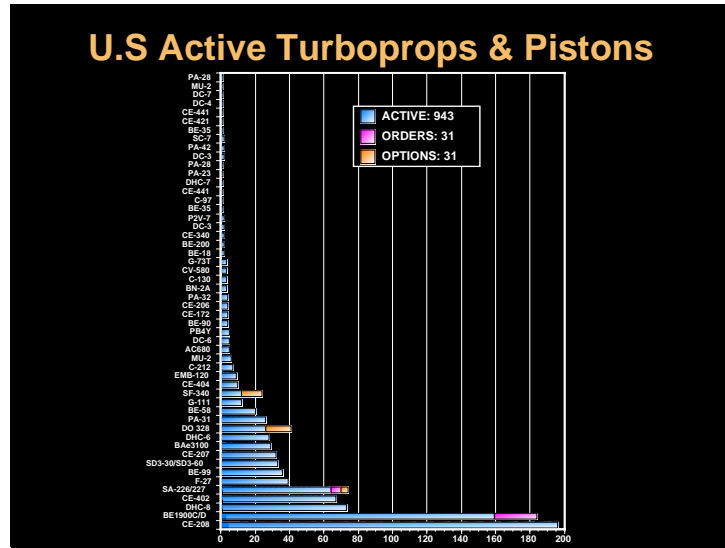
## **New Entrants Requirements**

- Older pilot
- High flight time in transport category AC
- Type rated in fleet with experience
- Current and qualified within 1-2 years

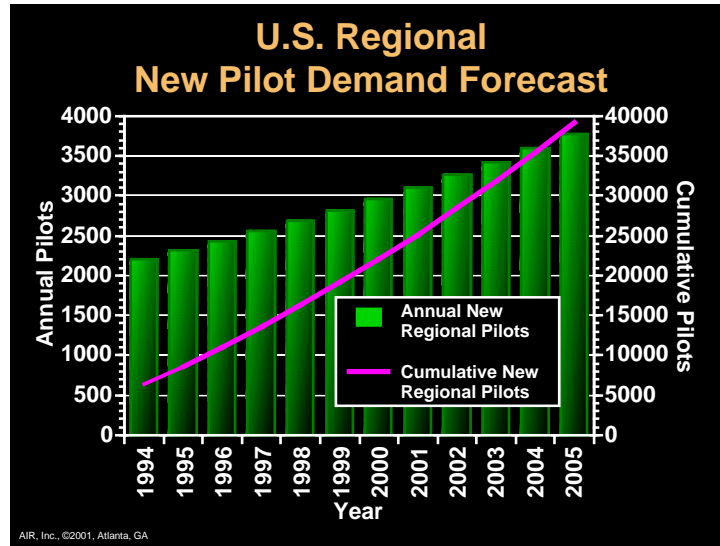
**58 Non-Jet Operators**  
**3,671 Pilots / 1,140 AC**

**48 Hired 242 Pilots in FEB**  
**2,782 in 2000**  
**76% Hired in 2000!**







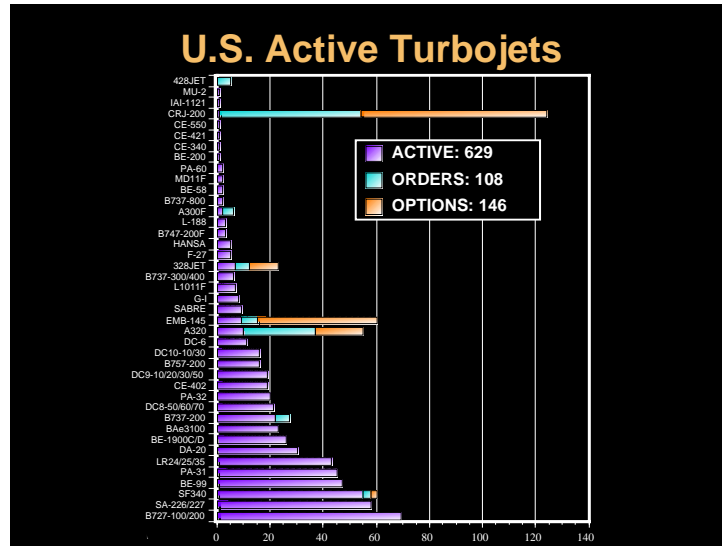


## Non-Jet Operators Requirements

- Age range: civil / mil **24-53 / 42-53**  
Avg: civil / mil **36 / 47**
- ATP: civil / mil **26% / 50%**
- Total time: 600-15,500 (**2,558 avg**) civil
- Total time: 1,554-12,200 (**5,097 avg**) mil
- At least 200 hours of ME - **1,107** civilian  
average / **3,613** military average
- Some turbine experience is preferred

**54 Jet Operators**  
**3,611 Pilots / 732 AC**

**34 Hired 222 Pilots in FEB**  
**2,805 in 2000**  
**78% Hired in 2000**

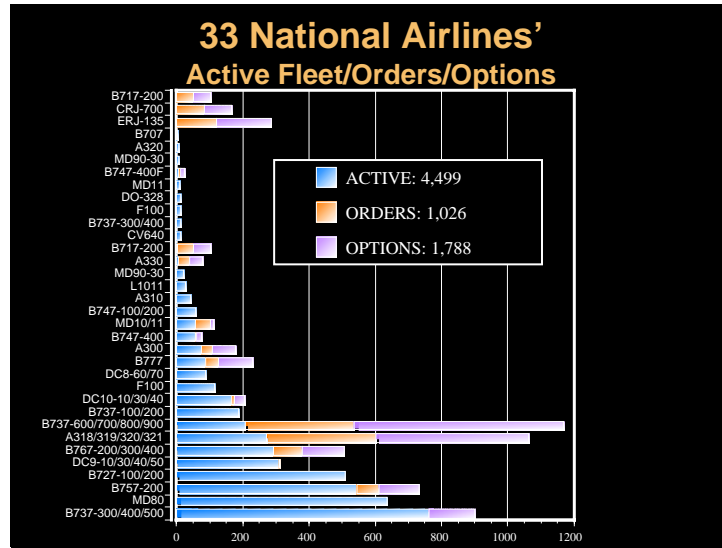


## Jet Operators Requirements

- Age range: civil / mil **23-56 / 31-62**  
Avg: civil / mil **36 / 41**
- ATP: civil / mil **63% / 100%**
- Type rating: civil / mil **44% / 68%**
- Total time: 900-14,575 (**4,084 avg**) civil
- Total time: 2,341-28,000 (**6,254 avg**) mil
- 4-Yr degree: civil / mil **64% / 94%**

**34 National Airlines**  
**19,486 Pilots / 1,911 AC**

**25 Hired 454 Pilots in FEB**  
**6,601 in 2000**  
**34% Hired in 2000**



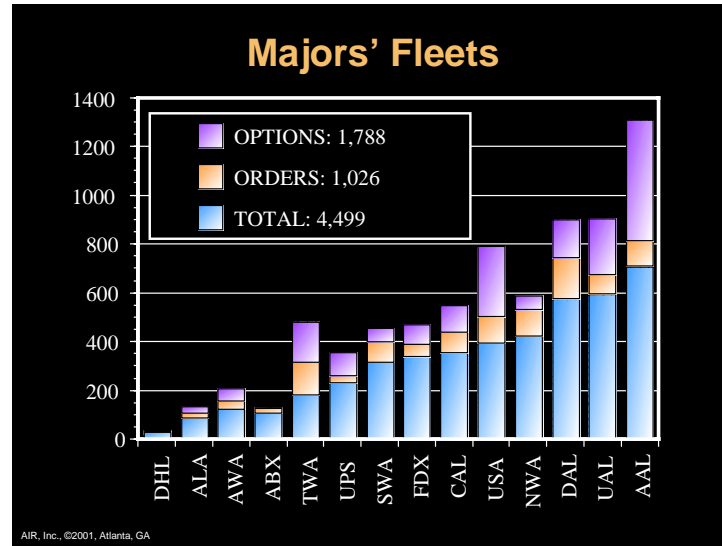
## National Airlines Requirements

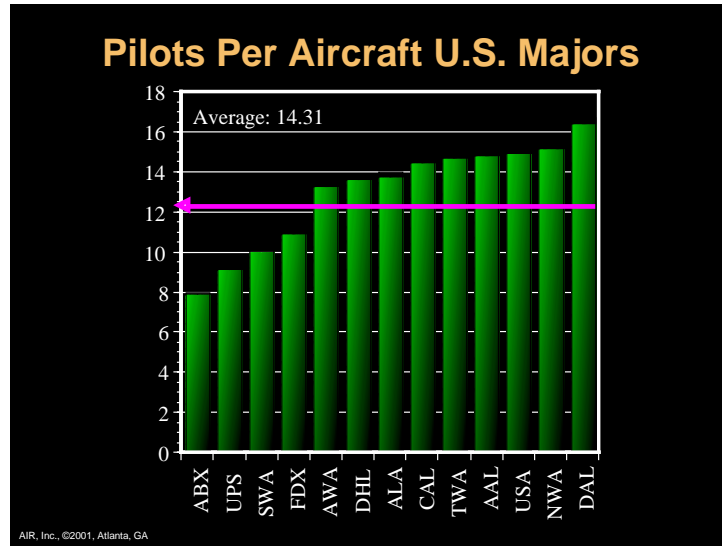
- Age range: civil / mil **21-53 / 26-57**  
Avg: civil / mil **34 / 37**
- ATP: civil / mil **43% / 59%**
- Typed: civil / mil **12% / 22%**
- Total time: 500-19,863 (**2,680 avg**) civil
- Total time: 601-7,846 (**2,834 avg**) mil
- Turbine: 800+ civil / mil **985 / 1,228**
- 4-Yr degree: civil / mil **70% / 91%**



**15 Major Airlines**  
**63,128 Pilots / 4,451 AC**

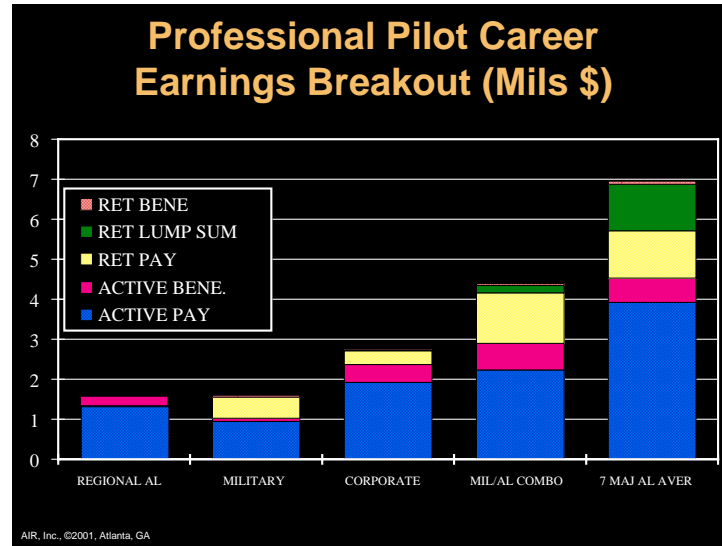
**14 Hired 453 Pilots in FEB**  
**4,779 in 2000**  
**7.5% Hired in 2000**

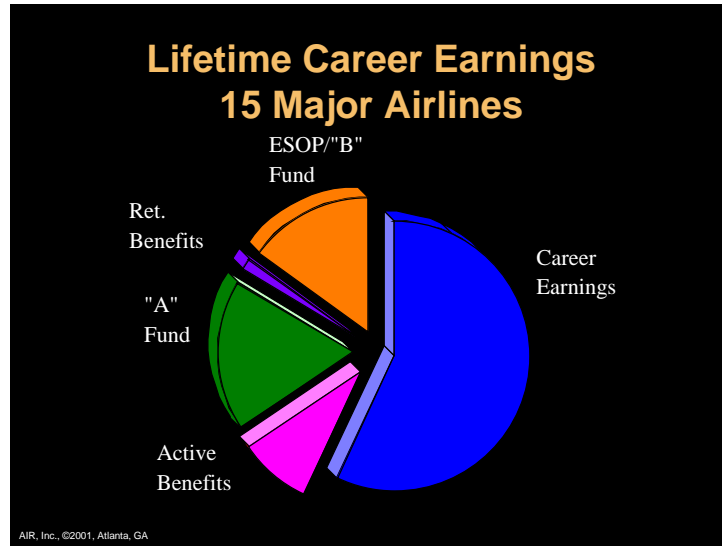


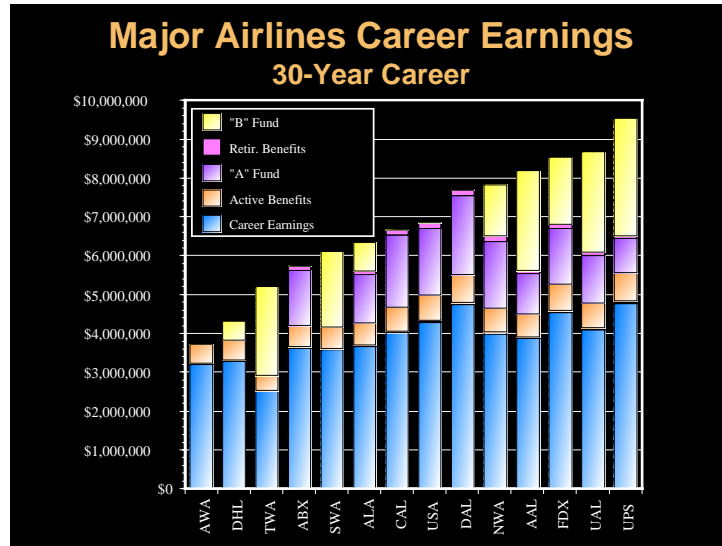


## **Major Airlines**

- A 30-year career with American, Delta, & United is between \$8.1m - \$12.7m
- United is the new top pay airline at \$12.7m
- Major airline average is now over \$8m
- Excellent retirement pay and benefits







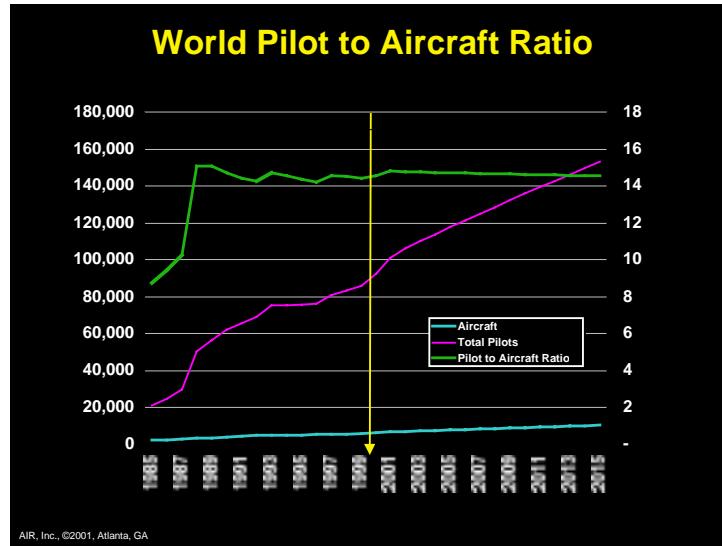
## Major Airlines Requirements

- Age range: civil / mil **23-54 / 29-53**  
Avg: civil / mil **34 / 37**
- ATP: civil / mil **97% / 96%**
- Typed: civil / mil **67% / 51%**
- Total time: 1,800-19,863 (**5,775 avg**) civil
- Total time: 1,250-17,229 (**2,951 avg**) mil
- Avg ME: civil / mil **4,148 / 2,951**



## Major Airlines Requirements

- 1,500+ hrs of turbine: civil / mil **2,170 / 2,097**
- FE written exam: civil / mil **70% / 80%**
- College degree: civil / mil **89% / 99%**
- Civil / military / mixed background  
**50%   50%   32%**



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